

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-27 (Canceled).

Claim 28 (Currently Amended): Synthetic particle consisting of at least one nucleic acid sequence ~~or nucleic acid derivative sequence~~ and one protein having a molecular weight in the range from 3900 to 4300 and comprising more than 50 percent by weight of arginine, wherein an average diameter of the particle is between about 10 nm and 100 μm , and wherein the nucleic acid sequence is an oligonucleotide or a derivative thereof.

Claim 29 (Previously Presented): Synthetic particle according to Claim 28, where the protein is selected from the following group: protamine, protamine base, protamine derivatives or salts.

Claim 30 (Previously Presented): Synthetic particle according to Claim 28, where the nucleic acid sequence is in single-stranded form.

Claim 31 (Canceled).

Claim 32 (Currently Amended): Synthetic particle according to Claim ~~34~~ 28, where the oligonucleotide consists of at least 5 nucleotides.

Claim 33 (Currently Amended): Synthetic particle according to Claim 31 28, where the derivative is a phosphorothioate or an anionic derivative.

Claim 34 (Canceled).

Claim 35 (Previously Presented): Synthetic particle according to Claim 28, where the particle carries a surface electric charge.

Claim 36 (Previously Presented): Synthetic particle according to Claim 35, where the surface charge is in the range from -40 mV to +40 mV.

Claim 37 (Currently Amended): Process for the preparation of synthetic particles, said process comprising the following steps:

a) preparation of an aqueous first salt-free solution containing a protein having a molecular weight in the range from 3900 to 4300, the protein comprising more than 50 percent by weight of arginine,

b) addition to the first solution of a second salt-free solution containing a nucleic acid sequence ~~or nucleic acid derivative sequence~~ wherein the nucleic acid sequence is an oligonucleotide or a derivative thereof, and

c) mixing of the first and second solution.

Claim 38 (Previously Presented): Process according to Claim 37, where the molar ratio of nucleic acid sequence or nucleic acid derivative sequence to protein is adjusted to produce a predetermined surface charge.

Claim 39 (Previously Presented): Process according to Claim 37, where the protein is selected from the following group: protamine, protamine base, protamine derivatives or salts.

Claim 40 (Previously Presented): Process according to Claim 39, where protamine, protamine base, protamine derivatives are obtained from salmon sperm.

Claim 41 (Previously Presented): Process according to claim 37, wherein the nucleic acid sequence is in single stranded form.

Claim 42 (Canceled).

Claim 43 (Currently Amended): Process according to Claim 42 37, where the oligonucleotide consists of at least 5 nucleotides.

Claim 44 (Currently Amended): Process according to Claim 42 37, where the derivative is a phosphorothioate or an anionic derivative.

Claim 45 (Previously Presented): Process according to Claim 37, where the diameter of the particle is in the range from 10 nm to 100 μm .

Claim 46 (Previously Presented) Process according to Claim 37, where the particle carries a surface electric charge.

Claim 47 (Previously Presented): Process according to Claim 37, where the surface charge is in the range from -40 mV to +40 mV.

Claim 48 (Currently Amended): A method of using a protein having a molecular weight in the range from 3900 to 4300 and comprising more than 50 percent by weight of arginine for the preparation of a synthetic particle, said method comprising the step of adding the protein to at least one nucleic acid sequence ~~or nucleic acid derivative sequence~~, wherein the nucleic acid is an oligonucleotide or a derivative thereof.

Claim 49 (Previously Presented) The method according to Claim 48, where the protein is selected from the following group: protamine, protamine base, protamine derivatives or salts.

Claim 50 (Canceled).

Claim 51 (Previously Presented): The synthetic particle of claim 28, wherein the protein comprises more than 60 percent by weight of arginine.

Claim 52 (Previously Presented): The process of claim 37, wherein the protein comprises more than 60 percent by weight of arginine.

Claim 53 (Previously Presented): The method of claim 48, wherein the protein comprises more than 60 percent by weight of arginine.